con-test®
ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

December 16, 2019

Alan Sundquist
CDW Consultants, Inc.
6 Huron Drive
Natick, MA 01760

Project Location: 225-227 Beaver St, Waltham, MA
Client Job Number:
Project Number: 1830
Laboratory Work Order Number: 19L0396

Enclosed are results of analyses for samples received by the laboratory on December 10, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle Koch

Michelle M. Koch
Project Manager

Table of Contents

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CDW Consultants, Inc.
6 Huron Drive
Natick, MA 01760
ATTN: Alan Sundquist

REPORT DATE: 12/16/2019

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1830

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 19L0396

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 225-227 Beaver St, Waltham, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
GP 3-4 (3-5')	19L0396-01	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
GP 3-5 (3-5')	19L0396-02	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
GP 3-6 (2-4')	19L0396-03	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	

con-test®
ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

MADEP-EPH-04-1.1

Qualifications:

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

n-Nonane
B248185-BS1

SW-846 8270D-E

Qualifications:

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Pyrene
19L0396-01[GP 3-4 (3-5')], 19L0396-02[GP 3-5 (3-5')], 19L0396-03[GP 3-6 (2-4')], B248158-BLK1, B248158-BS1, B248158-BSD1, S043694-CCV1

MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C 11-C22 aromatic range fraction in all samples in the batch. No significant modifications were made to the method.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test®
ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-4 (3-5') Sampled: 12/9/2019 13:30

Sample ID: 19L0396-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Acetophenone	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Aniline	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(b)fluoranthene	0.23	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Bis(2-chloroethoxy)methane	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Bis(2-chloroethyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Bis(2-chloroisopropyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Bis(2-Ethylhexyl)phthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
4-Bromophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Butylbenzylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
4-Chloroaniline	ND	0.76	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2-Chloronaphthalene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2-Chlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Dibenzofuran	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Di-n-butylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
1,2-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
1,3-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
1,4-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4-Dichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Diethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4-Dimethylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Dimethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4-Dinitrophenol	ND	0.76	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,6-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Di-n-octylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
1,2-Diphenylhydrazine/Azobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Fluoranthene	0.33	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Hexachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Hexachlorobutadiene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Hexachloroethane	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Isophorone	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-4 (3-5') Sampled: 12/9/2019 13:30

Sample ID: 19L0396-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
3/4-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Nitrobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2-Nitrophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
4-Nitrophenol	ND	0.76	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Pentachlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Phenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Pyrene	0.31	0.20	mg/Kg dry	1	V-05	SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4,5-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4,6-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	57.3	30-130		12/12/19 16:26
Phenol-d6	56.4	30-130		12/12/19 16:26
Nitrobenzene-d5	51.0	30-130		12/12/19 16:26
2-Fluorobiphenyl	65.8	30-130		12/12/19 16:26
2,4,6-Tribromophenol	54.9	30-130		12/12/19 16:26
p-Terphenyl-d14	62.7	30-130		12/12/19 16:26

con-test®
ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-4 (3-5') Sampled: 12/9/2019 13:30

Sample ID: 19L0396-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:01	MJH
Arsenic	11	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Barium	140	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Beryllium	0.31	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Cadmium	0.63	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Chromium	21	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Lead	1000	0.59	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Mercury	0.57	0.030	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 11:46	CJV
Nickel	17	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Selenium	ND	4.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Silver	0.55	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:01	MJH
Thallium	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Vanadium	41	0.79	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Zinc	310	0.79	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-4 (3-5') Sampled: 12/9/2019 13:30

Sample ID: 19L0396-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	85.4		% Wt	1		SM 2540G	12/11/19	12/11/19 15:03	adb

con-test®
ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-5 (3-5') Sampled: 12/9/2019 14:15

Sample ID: 19L0396-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Acetophenone	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Aniline	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Anthracene	0.48	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Benzo(a)anthracene	2.2	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Benzo(a)pyrene	2.0	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Benzo(b)fluoranthene	2.4	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Benzo(g,h,i)perylene	0.82	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Benzo(k)fluoranthene	0.90	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Bis(2-chloroethoxy)methane	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Bis(2-chloroethyl)ether	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Bis(2-chloroisopropyl)ether	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Bis(2-Ethylhexyl)phthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
4-Bromophenylphenylether	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Butylbenzylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
4-Chloroaniline	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2-Chloronaphthalene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2-Chlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Chrysene	2.1	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Dibenz(a,h)anthracene	0.21	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Dibenzofuran	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Di-n-butylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1,2-Dichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1,3-Dichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1,4-Dichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4-Dichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Diethylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4-Dimethylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Dimethylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4-Dinitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4-Dinitrotoluene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,6-Dinitrotoluene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Di-n-octylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1,2-Diphenylhydrazine/Azobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Fluoranthene	4.4	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Hexachlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Hexachlorobutadiene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Hexachloroethane	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Indeno(1,2,3-cd)pyrene	1.1	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Isophorone	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-5 (3-5') Sampled: 12/9/2019 14:15

Sample ID: 19L0396-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
3/4-Methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Nitrobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2-Nitrophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
4-Nitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Pentachlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Phenanthrene	1.7	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Phenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Pyrene	3.5	0.20	mg/Kg dry	1	V-05	SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1,2,4-Trichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4,5-Trichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4,6-Trichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	53.7	30-130		12/12/19 16:51
Phenol-d6	57.3	30-130		12/12/19 16:51
Nitrobenzene-d5	49.7	30-130		12/12/19 16:51
2-Fluorobiphenyl	67.6	30-130		12/12/19 16:51
2,4,6-Tribromophenol	62.5	30-130		12/12/19 16:51
p-Terphenyl-d14	60.3	30-130		12/12/19 16:51

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-5 (3-5') Sampled: 12/9/2019 14:15

Sample ID: 19L0396-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:07	MJH
Arsenic	19	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Barium	280	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Beryllium	0.42	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Cadmium	1.1	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Chromium	18	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Lead	1100	0.60	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Mercury	2.5	0.15	mg/Kg dry	5		SW-846 7471B	12/11/19	12/12/19 12:48	CJV
Nickel	11	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Selenium	ND	4.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Silver	0.70	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:07	MJH
Thallium	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Vanadium	29	0.80	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Zinc	540	0.80	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-5 (3-5') Sampled: 12/9/2019 14:15

Sample ID: 19L0396-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	83.8		% Wt	1		SM 2540G	12/11/19	12/11/19 15:03	adb

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-6 (2-4') Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Acetophenone	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Aniline	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Bis(2-chloroethoxy)methane	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Bis(2-chloroethyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Bis(2-chloroisopropyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Bis(2-Ethylhexyl)phthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
4-Bromophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Butylbenzylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
4-Chloroaniline	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2-Chloronaphthalene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2-Chlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Dibenzofuran	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Di-n-butylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,2-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,3-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,4-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4-Dichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Diethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4-Dimethylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Dimethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4-Dinitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,6-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Di-n-octylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,2-Diphenylhydrazine/Azobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Hexachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Hexachlorobutadiene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Hexachloroethane	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Isophorone	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-6 (2-4') Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
3/4-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Nitrobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2-Nitrophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
4-Nitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Pentachlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Phenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Pyrene	ND	0.20	mg/Kg dry	1	V-05	SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4,5-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4,6-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	64.1	30-130		12/12/19 17:16
Phenol-d6	65.6	30-130		12/12/19 17:16
Nitrobenzene-d5	57.5	30-130		12/12/19 17:16
2-Fluorobiphenyl	80.3	30-130		12/12/19 17:16
2,4,6-Tribromophenol	71.6	30-130		12/12/19 17:16
p-Terphenyl-d14	68.9	30-130		12/12/19 17:16

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-6 (2-4') Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
C19-C36 Aliphatics	120	11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Unadjusted C11-C22 Aromatics	52	11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
C11-C22 Aromatics	52	11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Chrysene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Fluorene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	82.3	40-140		12/16/19 12:31
o-Terphenyl (OTP)	80.3	40-140		12/16/19 12:31
2-Bromonaphthalene	96.4	40-140		12/16/19 12:31
2-Fluorobiphenyl	101	40-140		12/16/19 12:31

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-6 (2-4') Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:13	MJH
Arsenic	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Barium	12	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Beryllium	ND	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Cadmium	ND	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Chromium	4.4	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Lead	8.0	0.60	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Mercury	ND	0.029	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 11:50	CJV
Nickel	3.7	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Selenium	ND	4.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Silver	ND	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:13	MJH
Thallium	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Vanadium	7.8	0.80	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Zinc	12	0.80	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 225-227 Beaver St, Waltham, MA Sample Description: Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-6 (2-4') Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.3		% Wt	1		SM 2540G	12/11/19	12/11/19 15:03	adb

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 3546-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19L0396-03 [GP 3-6 (2-4')]	B248185	20.7	2.00	12/12/19

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
19L0396-01 [GP 3-4 (3-5')]	B248096	12/11/19
19L0396-02 [GP 3-5 (3-5')]	B248096	12/11/19
19L0396-03 [GP 3-6 (2-4')]	B248096	12/11/19

Prep Method: SW-846 3050B-SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19L0396-01 [GP 3-4 (3-5')]	B248270	1.48	50.0	12/12/19
19L0396-02 [GP 3-5 (3-5')]	B248270	1.50	50.0	12/12/19
19L0396-03 [GP 3-6 (2-4')]	B248270	1.49	50.0	12/12/19

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
'9L0396-01 [GP 3-4 (3-5')]	B248100	0.594	50.0	12/11/19
L0396-02 [GP 3-5 (3-5')]	B248100	0.590	50.0	12/11/19
19L0396-03 [GP 3-6 (2-4')]	B248100	0.616	50.0	12/11/19

Prep Method: SW-846 3546-SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19L0396-01 [GP 3-4 (3-5')]	B248158	30.6	1.00	12/11/19
19L0396-02 [GP 3-5 (3-5')]	B248158	30.8	1.00	12/11/19
19L0396-03 [GP 3-6 (2-4')]	B248158	30.7	1.00	12/11/19

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248158 - SW-846 3546										
Blank (B248158-BLK1)				Prepared: 12/11/19 Analyzed: 12/12/19						
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
4-Chloroaniline	ND	0.65	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
Chlorophenol	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.65	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
1,2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.65	mg/Kg wet							
Pentachlorophenol	ND	0.34	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248158 - SW-846 3546										
Blank (B248158-BLK1)				Prepared: 12/11/19 Analyzed: 12/12/19						
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							V-05
Pyridine	ND	0.34	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	*5.18*		mg/Kg wet	6.60		78.5	30-130			
Surrogate: Phenol-d6	*5.21*		mg/Kg wet	6.60		79.0	30-130			
Surrogate: Nitrobenzene-d5	*2.38*		mg/Kg wet	3.30		72.2	30-130			
Surrogate: 2-Fluorobiphenyl	*2.99*		mg/Kg wet	3.30		90.6	30-130			
Surrogate: 2,4,6-Tribromophenol	*4.45*		mg/Kg wet	6.60		67.4	30-130			
Surrogate: p-Terphenyl-d14	*2.40*		mg/Kg wet	3.30		72.8	30-130			
LCS (B248158-BS1)				Prepared: 12/11/19 Analyzed: 12/12/19						
Acenaphthene	1.18	0.17	mg/Kg wet	1.63		72.6	40-140			
Acenaphthylene	1.24	0.17	mg/Kg wet	1.63		76.2	40-140			
Acetophenone	1.19	0.33	mg/Kg wet	1.63		73.1	40-140			
Aniline	0.814	0.33	mg/Kg wet	1.63		50.0	40-140			
·nthracene	1.29	0.17	mg/Kg wet	1.63		79.1	40-140			
.nzo(a)anthracene	1.28	0.17	mg/Kg wet	1.63		78.7	40-140			
Benzo(a)pyrene	1.20	0.17	mg/Kg wet	1.63		73.9	40-140			
Benzo(b)fluoranthene	1.21	0.17	mg/Kg wet	1.63		74.2	40-140			
Benzo(g,h,i)perylene	1.20	0.17	mg/Kg wet	1.63		73.9	40-140			
Benzo(k)fluoranthene	1.24	0.17	mg/Kg wet	1.63		75.9	40-140			
Bis(2-chloroethoxy)methane	1.24	0.33	mg/Kg wet	1.63		75.9	40-140			
Bis(2-chloroethyl)ether	1.16	0.33	mg/Kg wet	1.63		71.5	40-140			
Bis(2-chloroisopropyl)ether	1.33	0.33	mg/Kg wet	1.63		81.8	40-140			
Bis(2-Ethylhexyl)phthalate	1.27	0.33	mg/Kg wet	1.63		78.2	40-140			
4-Bromophenylphenylether	1.30	0.33	mg/Kg wet	1.63		79.5	40-140			
Butylbenzylphthalate	1.31	0.33	mg/Kg wet	1.63		80.6	40-140			
4-Chloroaniline	0.991	0.64	mg/Kg wet	1.63		60.8	15-140			†
2-Chloronaphthalene	1.05	0.33	mg/Kg wet	1.63		64.3	40-140			
2-Chlorophenol	1.17	0.33	mg/Kg wet	1.63		72.1	30-130			
Chrysene	1.21	0.17	mg/Kg wet	1.63		74.2	40-140			
Dibenz(a,h)anthracene	1.15	0.17	mg/Kg wet	1.63		70.5	40-140			
Dibenzofuran	1.28	0.33	mg/Kg wet	1.63		78.3	40-140			
Di-n-butylphthalate	1.24	0.33	mg/Kg wet	1.63		76.3	40-140			
1,2-Dichlorobenzene	1.07	0.33	mg/Kg wet	1.63		65.6	40-140			
1,3-Dichlorobenzene	1.06	0.33	mg/Kg wet	1.63		64.9	40-140			
1,4-Dichlorobenzene	1.07	0.33	mg/Kg wet	1.63		65.7	40-140			
3,3-Dichlorobenzidine	1.07	0.17	mg/Kg wet	1.63		66.0	40-140			
2,4-Dichlorophenol	1.25	0.33	mg/Kg wet	1.63		76.7	30-130			
Diethylphthalate	1.23	0.33	mg/Kg wet	1.63		75.3	40-140			
2,4-Dimethylphenol	1.26	0.33	mg/Kg wet	1.63		77.4	30-130			
Dimethylphthalate	1.26	0.33	mg/Kg wet	1.63		77.3	40-140			
2,4-Dinitrophenol	0.420	0.64	mg/Kg wet	1.63		25.8	15-140			†
2,4-Dinitrotoluene	1.22	0.33	mg/Kg wet	1.63		74.8	40-140			
·Dinitrotoluene	1.33	0.33	mg/Kg wet	1.63		82.0	40-140			
Di-n-octylphthalate	1.31	0.33	mg/Kg wet	1.63		80.3	40-140			
1,2-Diphenylhydrazine/Azobenzene	1.27	0.33	mg/Kg wet	1.63		77.8	40-140			
Fluoranthene	1.23	0.17	mg/Kg wet	1.63		75.8	40-140			
Fluorene	1.23	0.17	mg/Kg wet	1.63		75.7	40-140			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B248158 - SW-846 3546											
LCS (B248158-BS1)				Prepared: 12/11/19 Analyzed: 12/12/19							
Hexachlorobenzene	1.27	0.33	mg/Kg wet	1.63		77.9	40-140				
Hexachlorobutadiene	1.10	0.33	mg/Kg wet	1.63		67.7	40-140				
Hexachloroethane	1.06	0.33	mg/Kg wet	1.63		65.1	40-140				
Indeno(1,2,3-cd)pyrene	1.25	0.17	mg/Kg wet	1.63		76.5	40-140				
Isophorone	1.23	0.33	mg/Kg wet	1.63		75.8	40-140				
2-Methylnaphthalene	1.32	0.17	mg/Kg wet	1.63		80.9	40-140				
2-Methylphenol	1.15	0.33	mg/Kg wet	1.63		70.8	30-130				
3/4-Methylphenol	1.23	0.33	mg/Kg wet	1.63		75.6	30-130				
Naphthalene	1.17	0.17	mg/Kg wet	1.63		71.7	40-140				
Nitrobenzene	1.12	0.33	mg/Kg wet	1.63		68.7	40-140				
2-Nitrophenol	1.18	0.33	mg/Kg wet	1.63		72.6	30-130				
4-Nitrophenol	1.11	0.64	mg/Kg wet	1.63		68.4	15-140				†
Pentachlorophenol	0.955	0.33	mg/Kg wet	1.63		58.6	30-130				
Phenanthrene	1.29	0.17	mg/Kg wet	1.63		79.4	40-140				
Phenol	1.17	0.33	mg/Kg wet	1.63		71.5	15-140				†
Pyrene	1.18	0.17	mg/Kg wet	1.63		72.3	40-140			V-05	
Pyridine	0.716	0.33	mg/Kg wet	1.63		43.9	30-140				†
1,2,4-Trichlorobenzene	1.14	0.33	mg/Kg wet	1.63		70.2	40-140				
',5-Trichlorophenol	1.25	0.33	mg/Kg wet	1.63		76.6	30-130				
,4,6-Trichlorophenol	1.25	0.33	mg/Kg wet	1.63		77.0	30-130				
Surrogate: 2-Fluorophenol	*5.08*		mg/Kg wet	6.51		78.0	30-130				
Surrogate: Phenol-d6	*5.04*		mg/Kg wet	6.51		77.4	30-130				
Surrogate: Nitrobenzene-d5	*2.44*		mg/Kg wet	3.26		74.9	30-130				
Surrogate: 2-Fluorobiphenyl	*3.11*		mg/Kg wet	3.26		95.4	30-130				
Surrogate: 2,4,6-Tribromophenol	*5.37*		mg/Kg wet	6.51		82.4	30-130				
Surrogate: p-Terphenyl-d14	*2.63*		mg/Kg wet	3.26		80.8	30-130				
LCS Dup (B248158-BSD1)				Prepared: 12/11/19 Analyzed: 12/12/19							
Acenaphthene	1.18	0.17	mg/Kg wet	1.66		71.6	40-140	0.144	30		
Acenaphthylene	1.25	0.17	mg/Kg wet	1.66		75.7	40-140	0.878	30		
Acetophenone	1.23	0.34	mg/Kg wet	1.66		74.5	40-140	3.59	30		
Aniline	0.841	0.34	mg/Kg wet	1.66		50.8	40-140	3.35	30		
Anthracene	1.30	0.17	mg/Kg wet	1.66		78.3	40-140	0.574	30		
Benzo(a)anthracene	1.31	0.17	mg/Kg wet	1.66		78.9	40-140	1.87	30		
Benzo(a)pyrene	1.25	0.17	mg/Kg wet	1.66		75.6	40-140	3.89	30		
Benzo(b)fluoranthene	1.26	0.17	mg/Kg wet	1.66		76.1	40-140	4.12	30		
Benzo(g,h,i)perylene	1.19	0.17	mg/Kg wet	1.66		71.7	40-140	1.46	30		
Benzo(k)fluoranthene	1.30	0.17	mg/Kg wet	1.66		78.6	40-140	5.14	30		
Bis(2-chloroethoxy)methane	1.30	0.34	mg/Kg wet	1.66		78.8	40-140	5.31	30		
Bis(2-chloroethyl)ether	1.22	0.34	mg/Kg wet	1.66		73.8	40-140	4.92	30		
Bis(2-chloroisopropyl)ether	1.39	0.34	mg/Kg wet	1.66		83.8	40-140	4.03	30		
Bis(2-Ethylhexyl)phthalate	1.37	0.34	mg/Kg wet	1.66		82.6	40-140	7.14	30		
4-Bromophenylphenylether	1.28	0.34	mg/Kg wet	1.66		77.0	40-140	1.55	30		
Butylbenzylphthalate	1.29	0.34	mg/Kg wet	1.66		77.8	40-140	1.97	30		
4-Chloroaniline	1.04	0.66	mg/Kg wet	1.66		62.7	15-140	4.59	30		†
2-Chloronaphthalene	1.09	0.34	mg/Kg wet	1.66		65.6	40-140	3.55	30		
2-Chlorophenol	1.23	0.34	mg/Kg wet	1.66		74.6	30-130	4.97	30		
ysene	1.30	0.17	mg/Kg wet	1.66		78.7	40-140	7.52	30		
Dibenz(a,h)anthracene	1.16	0.17	mg/Kg wet	1.66		70.1	40-140	0.959	30		
Dibenzofuran	1.29	0.34	mg/Kg wet	1.66		78.1	40-140	1.36	30		
Di-n-butylphthalate	1.30	0.34	mg/Kg wet	1.66		78.4	40-140	4.36	30		
1,2-Dichlorobenzene	1.12	0.34	mg/Kg wet	1.66		67.8	40-140	4.94	30		

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B248158 - SW-846 3546											
LCS Dup (B248158-BSD1)				Prepared: 12/11/19 Analyzed: 12/12/19							
1,3-Dichlorobenzene	1.09	0.34	mg/Kg wet	1.66		65.7	40-140	2.87	30		
1,4-Dichlorobenzene	1.11	0.34	mg/Kg wet	1.66		67.3	40-140	4.08	30		
3,3-Dichlorobenzidine	1.05	0.17	mg/Kg wet	1.66		63.7	40-140	1.88	30		
2,4-Dichlorophenol	1.28	0.34	mg/Kg wet	1.66		77.2	30-130	2.29	30		
Diethylphthalate	1.25	0.34	mg/Kg wet	1.66		75.4	40-140	1.83	30		
2,4-Dimethylphenol	1.30	0.34	mg/Kg wet	1.66		78.6	30-130	3.18	30		
Dimethylphthalate	1.25	0.34	mg/Kg wet	1.66		75.3	40-140	0.980	30		
2,4-Dinitrophenol	0.430	0.66	mg/Kg wet	1.66		26.0	15-140	2.41	30		†
2,4-Dinitrotoluene	1.29	0.34	mg/Kg wet	1.66		77.8	40-140	5.52	30		
2,6-Dinitrotoluene	1.32	0.34	mg/Kg wet	1.66		79.9	40-140	0.853	30		
Di-n-octylphthalate	1.40	0.34	mg/Kg wet	1.66		84.6	40-140	6.88	30		
1,2-Diphenylhydrazine/Azobenzene	1.30	0.34	mg/Kg wet	1.66		78.6	40-140	2.72	30		
Fluoranthene	1.30	0.17	mg/Kg wet	1.66		78.3	40-140	4.86	30		
Fluorene	1.28	0.17	mg/Kg wet	1.66		77.6	40-140	4.07	30		
Hexachlorobenzene	1.26	0.34	mg/Kg wet	1.66		76.0	40-140	0.854	30		
Hexachlorobutadiene	1.16	0.34	mg/Kg wet	1.66		70.1	40-140	5.10	30		
Hexachloroethane	1.09	0.34	mg/Kg wet	1.66		66.0	40-140	2.95	30		
Indeno(1,2,3-cd)pyrene	1.25	0.17	mg/Kg wet	1.66		75.6	40-140	0.406	30		
?phorone	1.32	0.34	mg/Kg wet	1.66		79.4	40-140	6.30	30		
Methylnaphthalene	1.41	0.17	mg/Kg wet	1.66		85.0	40-140	6.56	30		
2-Methylphenol	1.23	0.34	mg/Kg wet	1.66		74.3	30-130	6.44	30		
3/4-Methylphenol	1.29	0.34	mg/Kg wet	1.66		77.9	30-130	4.74	30		
Naphthalene	1.23	0.17	mg/Kg wet	1.66		74.3	40-140	5.15	30		
Nitrobenzene	1.22	0.34	mg/Kg wet	1.66		73.7	40-140	8.72	30		
2-Nitrophenol	1.26	0.34	mg/Kg wet	1.66		76.4	30-130	6.77	30		
4-Nitrophenol	1.18	0.66	mg/Kg wet	1.66		71.4	15-140	5.88	30		†
Pentachlorophenol	0.962	0.34	mg/Kg wet	1.66		58.1	30-130	0.751	30		
Phenanthrene	1.31	0.17	mg/Kg wet	1.66		79.4	40-140	1.67	30		
Phenol	1.21	0.34	mg/Kg wet	1.66		73.0	15-140	3.66	30		†
Pyrene	1.19	0.17	mg/Kg wet	1.66		71.8	40-140	0.976	30	V-05	
Pyridine	0.733	0.34	mg/Kg wet	1.66		44.3	30-140	2.46	30		†
1,2,4-Trichlorobenzene	1.20	0.34	mg/Kg wet	1.66		72.8	40-140	5.17	30		
2,4,5-Trichlorophenol	1.28	0.34	mg/Kg wet	1.66		77.2	30-130	2.37	30		
2,4,6-Trichlorophenol	1.21	0.34	mg/Kg wet	1.66		73.3	30-130	3.26	30		
Surrogate: 2-Fluorophenol	*5.17*		mg/Kg wet	6.62		78.0	30-130				
Surrogate: Phenol-d6	*5.20*		mg/Kg wet	6.62		78.5	30-130				
Surrogate: Nitrobenzene-d5	*2.52*		mg/Kg wet	3.31		76.1	30-130				
Surrogate: 2-Fluorobiphenyl	*2.98*		mg/Kg wet	3.31		90.0	30-130				
Surrogate: 2,4,6-Tribromophenol	*5.40*		mg/Kg wet	6.62		81.5	30-130				
Surrogate: p-Terphenyl-d14	*2.59*		mg/Kg wet	3.31		78.1	30-130				

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248185 - SW-846 3546										
Blank (B248185-BLK1)				Prepared: 12/12/19 Analyzed: 12/15/19						
C9-C18 Aliphatics	ND	10	mg/Kg wet							
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet							
Acenaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
Phenanthrene	ND	0.10	mg/Kg wet							
rene	ND	0.10	mg/Kg wet							
n-Decane	ND	0.50	mg/Kg wet							
n-Docosane	ND	0.50	mg/Kg wet							
n-Dodecane	ND	0.50	mg/Kg wet							
n-Eicosane	ND	0.50	mg/Kg wet							
n-Hexacosane	ND	0.50	mg/Kg wet							
n-Hexadecane	ND	0.50	mg/Kg wet							
n-Hexatriacontane	ND	0.50	mg/Kg wet							
n-Nonadecane	ND	0.50	mg/Kg wet							
n-Nonane	ND	0.50	mg/Kg wet							
n-Octacosane	ND	0.50	mg/Kg wet							
n-Octadecane	ND	0.50	mg/Kg wet							
n-Tetracosane	ND	0.50	mg/Kg wet							
n-Tetradecane	ND	0.50	mg/Kg wet							
n-Triacontane	ND	0.50	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	*3.76*		mg/Kg wet	5.00		75.1	40-140			
Surrogate: o-Terphenyl (OTP)	*3.88*		mg/Kg wet	5.00		77.6	40-140			
Surrogate: 2-Bromonaphthalene	*4.74*		mg/Kg wet	5.00		94.8	40-140			
Surrogate: 2-Fluorobiphenyl	*4.81*		mg/Kg wet	5.00		96.2	40-140			
LCS (B248185-BS1)				Prepared: 12/12/19 Analyzed: 12/15/19						
C9-C18 Aliphatics	19.2	10	mg/Kg wet	30.0		63.9	40-140			
C19-C36 Aliphatics	36.0	10	mg/Kg wet	40.0		89.9	40-140			
Unadjusted C11-C22 Aromatics	67.2	10	mg/Kg wet	85.0		79.0	40-140			
Acenaphthene	3.51	0.10	mg/Kg wet	5.00		70.3	40-140			
Acenaphthylene	3.23	0.10	mg/Kg wet	5.00		64.7	40-140			
ıthracene	3.73	0.10	mg/Kg wet	5.00		74.7	40-140			
.nzo(a)anthracene	3.81	0.10	mg/Kg wet	5.00		76.1	40-140			
Benzo(a)pyrene	3.61	0.10	mg/Kg wet	5.00		72.2	40-140			
Benzo(b)fluoranthene	3.71	0.10	mg/Kg wet	5.00		74.1	40-140			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B248185 - SW-846 3546											
LCS (B248185-BS1)				Prepared: 12/12/19 Analyzed: 12/15/19							
Benzo(g,h,i)perylene	3.54	0.10	mg/Kg wet	5.00		70.7		40-140			
Benzo(k)fluoranthene	3.65	0.10	mg/Kg wet	5.00		73.0		40-140			
Chrysene	3.87	0.10	mg/Kg wet	5.00		77.5		40-140			
Dibenz(a,h)anthracene	3.66	0.10	mg/Kg wet	5.00		73.2		40-140			
Fluoranthene	3.84	0.10	mg/Kg wet	5.00		76.7		40-140			
Fluorene	3.65	0.10	mg/Kg wet	5.00		73.0		40-140			
Indeno(1,2,3-cd)pyrene	3.46	0.10	mg/Kg wet	5.00		69.2		40-140			
2-Methylnaphthalene	3.14	0.10	mg/Kg wet	5.00		62.7		40-140			
Naphthalene	2.94	0.10	mg/Kg wet	5.00		58.7		40-140			
Phenanthrene	3.86	0.10	mg/Kg wet	5.00		77.2		40-140			
Pyrene	3.92	0.10	mg/Kg wet	5.00		78.5		40-140			
n-Decane	2.17	0.50	mg/Kg wet	5.00		43.4		40-140			
n-Docosane	3.85	0.50	mg/Kg wet	5.00		77.0		40-140			
n-Dodecane	2.76	0.50	mg/Kg wet	5.00		55.3		40-140			
n-Eicosane	3.74	0.50	mg/Kg wet	5.00		74.8		40-140			
n-Hexacosane	3.94	0.50	mg/Kg wet	5.00		78.7		40-140			
n-Hexadecane	3.63	0.50	mg/Kg wet	5.00		72.6		40-140			
n-Hexatriacontane	3.55	0.50	mg/Kg wet	5.00		70.9		40-140			
Nonadecane	3.76	0.50	mg/Kg wet	5.00		75.3		40-140			
n-Nonane	1.44	0.50	mg/Kg wet	5.00		28.9	*	30-140			L-07
n-Octacosane	3.87	0.50	mg/Kg wet	5.00		77.4		40-140			
n-Octadecane	3.78	0.50	mg/Kg wet	5.00		75.7		40-140			
n-Tetracosane	3.87	0.50	mg/Kg wet	5.00		77.3		40-140			
n-Tetradecane	3.31	0.50	mg/Kg wet	5.00		66.2		40-140			
n-Triacontane	3.96	0.50	mg/Kg wet	5.00		79.2		40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00				0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00				0-5			
Surrogate: Chlorooctadecane (COD)	*3.55*		mg/Kg wet	5.00		70.9		40-140			
Surrogate: o-Terphenyl (OTP)	*3.70*		mg/Kg wet	5.00		74.0		40-140			
Surrogate: 2-Bromonaphthalene	*4.66*		mg/Kg wet	5.00		93.3		40-140			
Surrogate: 2-Fluorobiphenyl	*4.96*		mg/Kg wet	5.00		99.2		40-140			
LCS Dup (B248185-BSD1)				Prepared: 12/12/19 Analyzed: 12/15/19							
C9-C18 Aliphatics	20.0	10	mg/Kg wet	30.0		66.6		40-140	4.25	25	
C19-C36 Aliphatics	34.8	10	mg/Kg wet	40.0		87.1		40-140	3.14	25	
Unadjusted C11-C22 Aromatics	65.2	10	mg/Kg wet	85.0		76.7		40-140	2.93	25	
Acenaphthene	3.59	0.10	mg/Kg wet	5.00		71.8		40-140	2.17	25	
Acenaphthylene	3.34	0.10	mg/Kg wet	5.00		66.8		40-140	3.26	25	
Anthracene	3.57	0.10	mg/Kg wet	5.00		71.4		40-140	4.54	25	
Benzo(a)anthracene	3.63	0.10	mg/Kg wet	5.00		72.5		40-140	4.86	25	
Benzo(a)pyrene	3.47	0.10	mg/Kg wet	5.00		69.3		40-140	4.10	25	
Benzo(b)fluoranthene	3.56	0.10	mg/Kg wet	5.00		71.2		40-140	3.98	25	
Benzo(g,h,i)perylene	3.42	0.10	mg/Kg wet	5.00		68.4		40-140	3.30	25	
Benzo(k)fluoranthene	3.50	0.10	mg/Kg wet	5.00		69.9		40-140	4.22	25	
Chrysene	3.69	0.10	mg/Kg wet	5.00		73.9		40-140	4.79	25	
Dibenz(a,h)anthracene	3.54	0.10	mg/Kg wet	5.00		70.8		40-140	3.37	25	
Fluoranthene	3.66	0.10	mg/Kg wet	5.00		73.1		40-140	4.85	25	
Fluorene	3.59	0.10	mg/Kg wet	5.00		71.7		40-140	1.73	25	
Indeno(1,2,3-cd)pyrene	3.37	0.10	mg/Kg wet	5.00		67.4		40-140	2.68	25	
2-Methylnaphthalene	3.37	0.10	mg/Kg wet	5.00		67.3		40-140	7.06	25	
Naphthalene	3.25	0.10	mg/Kg wet	5.00		65.0		40-140	10.2	25	
Phenanthrene	3.69	0.10	mg/Kg wet	5.00		73.8		40-140	4.54	25	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248185 - SW-846 3546										
LCS Dup (B248185-BSD1)				Prepared: 12/12/19 Analyzed: 12/15/19						
Pyrene	3.73	0.10	mg/Kg wet	5.00		74.7	40-140	4.92	25	
n-Decane	2.52	0.50	mg/Kg wet	5.00		50.4	40-140	14.8	25	
n-Docosane	3.69	0.50	mg/Kg wet	5.00		73.8	40-140	4.25	25	
n-Dodecane	3.04	0.50	mg/Kg wet	5.00		60.9	40-140	9.63	25	
n-Eicosane	3.59	0.50	mg/Kg wet	5.00		71.7	40-140	4.14	25	
n-Hexacosane	3.81	0.50	mg/Kg wet	5.00		76.2	40-140	3.27	25	
n-Hexadecane	3.55	0.50	mg/Kg wet	5.00		71.0	40-140	2.21	25	
n-Hexatriacontane	3.48	0.50	mg/Kg wet	5.00		69.7	40-140	1.76	25	
n-Nonadecane	3.63	0.50	mg/Kg wet	5.00		72.6	40-140	3.64	25	
n-Nonane	1.70	0.50	mg/Kg wet	5.00		34.0	30-140	16.3	25	
n-Octacosane	3.75	0.50	mg/Kg wet	5.00		74.9	40-140	3.20	25	
n-Octadecane	3.65	0.50	mg/Kg wet	5.00		73.0	40-140	3.58	25	
n-Tetracosane	3.74	0.50	mg/Kg wet	5.00		74.7	40-140	3.37	25	
n-Tetradecane	3.43	0.50	mg/Kg wet	5.00		68.6	40-140	3.51	25	
n-Triacontane	3.83	0.50	mg/Kg wet	5.00		76.7	40-140	3.25	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	*3.50*		mg/Kg wet	5.00		70.1	40-140			
Surrogate: o-Terphenyl (OTP)	*3.49*		mg/Kg wet	5.00		69.8	40-140			
Surrogate: 2-Bromonaphthalene	*5.06*		mg/Kg wet	5.00		101	40-140			
Surrogate: 2-Fluorobiphenyl	*5.35*		mg/Kg wet	5.00		107	40-140			

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248100 - SW-846 7471										
Blank (B248100-BLK1)				Prepared: 12/11/19 Analyzed: 12/12/19						
Mercury	ND	0.025	mg/Kg wet							
LCS (B248100-BS1)				Prepared: 12/11/19 Analyzed: 12/12/19						
Mercury	6.65	0.39	mg/Kg wet	7.61		87.3	72.7-127.3			
LCS Dup (B248100-BSD1)				Prepared: 12/11/19 Analyzed: 12/12/19						
Mercury	7.27	0.38	mg/Kg wet	7.61		95.5	72.7-127.3	8.91	20	
Batch B248270 - SW-846 3050B										
Blank (B248270-BLK1)				Prepared: 12/12/19 Analyzed: 12/16/19						
Antimony	ND	1.7	mg/Kg wet							
Arsenic	ND	1.7	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.17	mg/Kg wet							
Chromium	ND	0.33	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Nickel	ND	0.33	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
Thallium	ND	1.7	mg/Kg wet							
Vanadium	ND	0.67	mg/Kg wet							
Zinc	ND	0.67	mg/Kg wet							
LCS (B248270-BS1)				Prepared: 12/12/19 Analyzed: 12/16/19						
Antimony	119	5.0	mg/Kg wet	147		80.7	4.2-196.6			
Arsenic	140	5.0	mg/Kg wet	143		98.0	83.2-117.5			
Barium	424	5.0	mg/Kg wet	415		102	82.7-117.6			
Beryllium	173	0.50	mg/Kg wet	179		96.6	83.2-117.3			
Cadmium	54.0	0.50	mg/Kg wet	56.2		96.0	82.9-117.3			
Chromium	97.6	1.0	mg/Kg wet	101		96.7	82.4-116.8			
Lead	124	1.5	mg/Kg wet	125		99.2	82.4-116.8			
Nickel	107	1.0	mg/Kg wet	108		99.3	82.9-117.6			
Selenium	73.4	10	mg/Kg wet	77.9		94.2	79.3-120.7			
Silver	39.1	1.0	mg/Kg wet	34.3		114	81-119.2			
Thallium	121	5.0	mg/Kg wet	113		107	80.8-118.6			
Vanadium	79.0	2.0	mg/Kg wet	83.7		94.3	79.8-120.7			
Zinc	225	2.0	mg/Kg wet	240		94.0	80.8-118.8			
LCS (B248270-BS2) MRL Check				Prepared: 12/12/19 Analyzed: 12/16/19						
Lead	0.504	0.49	mg/Kg wet	0.490		103	82.4-116.8			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248270 - SW-846 3050B										
LCS Dup (B248270-BSD1)				Prepared: 12/12/19 Analyzed: 12/16/19						
Antimony	113	5.0	mg/Kg wet	147		76.7	4.2-196.6	5.08	30	
Arsenic	138	5.0	mg/Kg wet	143		96.5	83.2-117.5	1.56	30	
Barium	416	5.0	mg/Kg wet	415		100	82.7-117.6	2.01	20	
Beryllium	173	0.50	mg/Kg wet	179		96.7	83.2-117.3	0.0885	30	
Cadmium	54.2	0.50	mg/Kg wet	56.2		96.4	82.9-117.3	0.400	20	
Chromium	96.3	1.0	mg/Kg wet	101		95.3	82.4-116.8	1.37	30	
Lead	121	1.5	mg/Kg wet	125		97.1	82.4-116.8	2.13	30	
Nickel	107	1.0	mg/Kg wet	108		98.6	82.9-117.6	0.640	30	
Selenium	71.1	10	mg/Kg wet	77.9		91.2	79.3-120.7	3.17	30	
Silver	38.4	1.0	mg/Kg wet	34.3		112	81-119.2	1.77	30	
Thallium	120	5.0	mg/Kg wet	113		107	80.8-118.6	0.661	30	
Vanadium	77.5	2.0	mg/Kg wet	83.7		92.6	79.8-120.7	1.90	30	
Zinc	222	2.0	mg/Kg wet	240		92.7	80.8-118.8	1.37	30	

con-test®
ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP-EPH-04-1.1 in Soil	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
MADEP-EPH-04-1.1 in Water	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
SW-846 6010D in Soil	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010D in Soil	
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8270D-E in Soil	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
1,4-Dichlorobenzene	NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270D-E in Soil	
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine/Azobenzene	NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH
SW-846 8270D-E in Water	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY
Aniline	CT,NY
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

ertified Analyses included in this Report

Analyte	Certifications
SW-846 8270D-E in Water	
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	CT,NY,NH
1,3-Dichlorobenzene	CT,NY,NH
1,4-Dichlorobenzene	CT,NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine/Azobenzene	NY
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH

con-test®
ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

http://www.contestlabs.com

Doc # 381 Rev 2_06262019

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

MMK 1910396

Company Name: CDM Consultants Inc
Address: 6 Huron Dr, Natick, MA
Phone: 508-875-2657
Project Name: 225-227 Bethany St
Project Location: 225-227 Bethany St, Waltham
Project Number: 15320.10
Project Manager: Kathy Campbell
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: A. Swanson T

Requested Turnaround Time				Dissolved Metals Samples	
7-Day 5	☒	10-Day	☐	○	Field Filtered
PFAS 10-Day (std)	☐	Due Date:		○	Lab to Filter
Rush-Approval Required				**Orthophosphate Samples**	
1-Day	☐	3-Day	☐	○	Field Filtered
2-Day	☐	4-Day	☐	○	Lab to Filter

Data Delivery

Format: PDF ☒ EXCEL ☒
Other:
CLP Like Data Pkg Required: ☐
Email To: ASwanson T @ cdmconsultants.com
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Grab/Comp	Matrix Code	Preservation Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE
1	GP3-4 (3-5')	12/9/19	1330	GRAB	SL	U		X			
2	GP3-5 (3-5')	"	1405	"	"	"		X			
3	GP3-6 (2-4')	"	1500	"	"	"		X			

Relinquished by: (signature) — Date/Time: 12/10/19
Received by: (signature) Paul Chatterton — Date/Time: 12-10-19 11:19
Relinquished by: (signature) Paul Chatterton — Date/Time: 12-10-19 1800
Received by: (signature) — Date/Time: 12/10/19 1800
Relinquished by: (signature) — Date/Time: 12/10/19 2030
Received by: (signature) — Date/Time: 12/10/19 2030
Relinquished by: (signature) — Date/Time:
Received by: (signature) — Date/Time:

Client Comments:

Detection Limit Requirements

MA
CT
Other:

Special Requirements

☒ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. Th Chain of Custody is a legal document that must be complete and accurate and is used to determine wh analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Cc Test values your partnership on each project and will try to assist with missing information, but will not held accountable.

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[2] Preservation Code
Courier Use Only
Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N

*Contest is not responsible for missing samples from prepacked coolers

Table of Contents

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client CDW

Received By BSF Date 12/10/19 Time 2030

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____

Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 4.1

By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? n/a Were Samples Tampered with? n/a

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T

Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? F Who was notified? _____

Is there enough Volume? T

Is there Headspace where applicable? n/a MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

/ere trip blanks received? F On COC? F

Do all samples have the proper pH? Acid n/a Base n/a

Vials	#	Containers	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	3
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 19L0396
Project Location: 225-227 Beaver St, Waltham, MA	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

19L0396-01 thru 19L0396-03

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A ( )	8082 PCB CAM V A ( )	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )
8270 SVOC CAM II B (X)	7010 Metals CAM III C ( )	MassDEP VPH CAM IV C ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
6010 Metals CAM III A (X)	6020 Metals CAM III D ( )	MassDEP EPH CAM IV B (X)	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☑ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Lisa Worthington Position: Technical Representative

Printed Name: Lisa A. Worthington Date: 12/16/19